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CLAIMS

1. A method for giving to at least one user (A, B, C) access to a respective home operator (HSPA, HSPB, HSPC) over a communication network, access being via an access network (AN, ASP) and through any of a plurality of supported visited networks (VSP1, VSP2, VSP3), characterised in that it includes the step of forwarding to the user (A, B, C) a list of said supported visited networks (VSP1, VSP2, VSP3), whereby said user (A, B, C) is given the possibility of selecting one of said supported visited networks (VSP1, VSP2, VSP3) as the path for reaching said respective home operator (HSPA, HSPB, HSPC).

2. The method of claim 1, characterised in that it includes the steps of:
   - receiving from said user (A, B, C) user credentials at said access network (AN, ASP),
   - forwarding said user credentials to an authentication function at said access network (AN, ASP),
   - retrieving a set of available roaming networks (VSP1, VSP2; VSP3) for said user (A, B, C), thus retrieving a list of operators holding a roaming agreement with said respective home operator (HSPA, HSPB, HSPC) of said user (A, B, C), and
   - forwarding said list to said user (A, B, C).

3. The method of claim 2, characterised in that it includes the steps of:
   - receiving from said user (A, B, C) at said authentication function an identifier of an operator selected from said list, and
   - forwarding to the operator identified by said identifier a user's authentication request.

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4. The method of claim 3, characterised in that it includes the step of including the user credentials in said user's authentication request.

5. The method of claim 1, characterised in that it
5 includes the steps of:

- assigning to said user (A, B, C) a NAI identifier,

- identifying said user (A, B, C) through the realm part of said NAI identifier.

10 6. The method of claim 2, characterised in that said steps of receiving and forwarding user credentials and retrieving a set of available roaming networks is performed only once, when a first authentication request is received by said authentication function in
15 respect of a user for which no direct roaming agreements exist with said user's respective home operator (HSPA, HSPB, HSPC).

7. The method of claim 2, characterised in that, when said access network (AN, ASP) has a direct roaming
20 agreement with said user's respective home operator (HSPA, HSPB, HSPC), it includes the step of forwarding to said user (A, B, C) a list including said user's respective home operator only.

8. The method of claim 2, characterised in that, when
25 said access network (AN, ASP) has a direct roaming agreement with said user's respective home operator (HSPA, HSPB, HSPC), it includes the step of directly forwarding the user's authentication request to said user's respective home operator (HSPA, HSPB, HSPC).

30 9. The method of claim 3, characterised in that it includes the step of proxying said user's authentication request from said operator identified by said identifier to said user's respective home operator (HSPA, HSPB, HSPC).

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10. The method of claim 2, characterised in that it includes the step of selecting said authentication function as an EAP based function.

11. The method of claim 1, characterised in that it
5 includes the step of including in at least one of said access network (WISP1, WISP2, WISP3) and said supported visited networks (VSP1, VSP2, VSP3) a Diameter node.

12. The method of claim 1, characterised in that it includes the step of including in at least one of said
10 access network (WISP1, WISP2, WISP3) and said supported visited networks (VSP1, VSP2, VSP3) a proxy/relay (DRL) agent.

13. The method of claim 1, characterised in that it includes the step of including in at least one of said
15 supported visited networks (VSP1, VSP2, VSP3) a redirect agent (DRD).

14. The method of claim 3, characterised in that it includes the step of including in at least one of said supported visited networks (VSP1, VSP2, VSP3):
20   - a proxy/relay agent for those authentication requests that must be forwarded towards an identified operator, and
      - as a redirect agent for those authentication requests that have an unknown realm.

25   15. The method of claim 14, characterised in that it includes the steps of:
      - redirecting to all said supported visited networks (VauS/DRDs) the authentication requests whose realm does not correspond to any realm identified at
30 said access network (AauS/DRL), and
      - returning from said supported visited networks (VauS/DRDs) to said access network (AauS/DRL) redirect notifications as well as contact information to said user's respective home operator.

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16. A communication network arranged for giving to
at least one user (A, B, C) access to a respective home
operator (HSPA, HSPB, HSPC) via an access network (AN,
ASP) and through any of a plurality of supported
5 visited networks (VSP1, VSP2, VSP3), characterised in
that it said access network (AN, ASP) is configured for
forwarding to the user (A, B, C) a list of said
supported visited networks (VSP1, VSP2, VSP3), whereby
said user (A, B, C) is given the possibility of
10 selecting one of said supported visited networks (VSP1,
VSP2, VSP3) as the path for reaching said respective
home operator (HSPA, HSPB, HSPC).

17. The network of claim 16, characterised in that:
- said access network (AN, ASP) and an associated
15 authentication server, said access network (AN, ASP)
being configured for receiving user credentials from
said user (A, B, C) and   forwarding said user
credentials to said authentication server,
- said authentication server is configured for
20 retrieving a set of available roaming networks (VSP1,
VSP2; VSP3) for said user (A, B, C), thus retrieving a
list of operators holding a roaming agreement with said
respective home operator (HSPA, HSPB, HSPC) of said
user (A, B, C), and forwarding said list to said user
25 (A, B, C).

18. The network of claim 17, characterised in that
said authentication server is configured for receiving
from said user (A, B, C) an identifier of an operator
selected from said list, and forwarding to the operator
30 identified by said identifier a user's authentication
request.

19. The network of claim 18, characterised in that
said authentication server is configured for including
the user credentials in said user's authentication
35 request.

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20. The network of claim 16, characterised in that, said user (A, B, C) being identified by a NAI identifier, said access network (AN, ASP) is configured for identifying said user (A, B, C) through the realm
5 part of said NAI identifier.

21. The network of claim 17, characterised in that said authentication server is configured for receiving and forwarding user credentials and retrieving a set of available roaming networks only once, when a first
10 authentication request is received by said authentication server in respect of a user for which no direct roaming agreements exist with said user's respective home operator (HSPA, HSPB, HSPC).

22. The network of claim 17, characterised in that
15 said access network (AN, ASP) has a direct roaming agreement with said user's respective home operator (HSPA, HSPB, HSPC), and said access network (AN, ASP) is configured for forwarding to said user (A, B, C) a list including said user's respective home operator
20 only.

23. The network of claim 17, characterised in that said access network (AN, ASP) has a direct roaming agreement with said user's respective home operator (HSPA, HSPB, HSPC), and said access network (AN, ASP)
25 is configured for directly forwarding the user's authentication request to said user's respective home operator (HSPA, HSPB, HSPC).

24. The network of claim 18, characterised in that aid supported visited networks (VSP1, VSP2, VSP3) are
30 configured for proxying said user's authentication request from said operator identified by said identifier to said user's respective home operator (HSPA, HSPB, HSPC).

25. The network of claim 17, characterised in that
35 said authentication server is an EAP based server.

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26. The network of claim 16, characterised in that at least one of said access network (WISP1, WISP2, WISP3) and said supported visited networks (VSP1, VSP2, VSP3)is configured as a Diameter node.

27. The network of claim 16, characterised in that at least one of said access network (WISP1, WISP2, WISP3) and said supported visited networks (VSP1, VSP2, VSP3) includes a proxy/relay (DRL) agent.

28. The network of claim 16, characterised in that at least one of said supported visited networks (VSP1, VSP2, VSP3) includes a redirect agent (DRD).

29. The network of claim 18, characterised in that at least one of said supported visited networks (VSP1, VSP2, VSP3)includes:

- a proxy/relay agent for those authentication requests that must be forwarded towards an identified operator, and

- as a redirect agent for those authentication requests that have an unknown realm.

30. The network of claim 29, characterised in that said access network (WISP1, WISP2, WISP3) is configured for redirecting to all said supported visited networks (VauS/DRDs) the authentication requests whose realm does not correspond to any realm identified at said access network (AauS/DRL), and in that said supported visited networks (VauS/DRDs) are configured for returning to said access network (AauS/DRL) redirect notifications as well as contact information to said user's respective home operator.

31. The network of claim 16, in the form of an IP network

32. A computer program product loadable in the memory of at least one computer and including software code portions for performing the steps of any of claims 1 to 15.